2. Project Narrative

Introduction- Fort Belvoir is located southwest of the Washington D.C. metropolitan area along the Potomac River in Fairfax County Virginia and is part of the prestigious U.S. Army Military District of Washington (MDW). The present AAFES Post Exchange (PX) Shopping Center will be replaced with a new 263,438 square feet shopping center to serve Fort Belvoir's population. The undeveloped 27.4-acre site is primarily heavily wooded and is within the Community zone on Fort Belvoir. The new shopping center will include nine Food Concepts, a Military Clothing Sales Store (MCSS), 4-Seasons Store (re-designated the Outdoor Living Area (ODL) relocated from the South Post) and 20 Service and/or Concession activities. These services will be located within the building's "Interior Market Hall" corridor with direct connection into the main retail sales area. The projected hours of operation for this facility are 9:00AM-9:00PM Monday thru Saturday and 10:00 AM – 7:00 PM on Sundays.

The site is adjacent to the existing PX Shopping Center and bordered by Gunston, John Kingman and Woodlawn Roads. Site improvements include paved, illuminated parking lots, circulation and service drives, underground storm water detention, stormwater management facilities comprised of porous pavement, bioretention trenches, mechanical filtration systems and ponds along with the incorporation of best management practices will be integrated to manage and treat storm events. A heavily landscaped plan contributes to the replacement of trees required as part of the development.

Site- The site encompasses an area of approximately 27.4-acres. Customer access for the proposed building will primarily come from Gorgas road (via Stonewall Jackson Road) and John Kingman Road.

The design provides AAFES the ability to satisfy ADA parking requirements while still providing parking spaces close to the entrances, but outside the Force Protection Standoff distance. Preferred parking spaces have also been designated for car pool vehicles and low emitting fuel vehicles obtaining LEED credits. Truck delivery and the loading dock will be located at the rear of the proposed building.

Employee parking is provided for 250 employees at shift overlap at the rate of .60 for a total of 125 parking spaces. 15 additional spaces are provided for Customer pick-up at the Outdoor Living Area (ODL), and an additional 14 spaces for Vendors and Visitors entering that side of the building. Food Court delivery trucks and trash pickup are also located along the north side of the building. All vehicles entering these areas will use the security gated entrance from John Kingman Road. Bicycle racks are also provided for customers and employees (the existing bicycle pathway system along John Kingman Road will be retained), to also contribute toward attaining a LEED Alternative Transportation Credit.

Landscaping- The landscape design has been developed to exist and perform in harmonious combination with the architecture and the environment and will comply with the AT/FP requirements and Ft. Belvoir Installation Design Guide. Other considerations include evaluation of the existing vegetation, the use of Fort Belvoir's established landscape standards and plant list, avoiding evasive plant species, and incorporating LID and LEED standards.

Existing trees shall be preserved as much as possible, and sight lines established with the goal of improving security oversight to the facility. Removed trees shall be replaced per the previously approved agreement with Ft. Belvoir. An estimated 450 2" caliper and greater trees can be accommodated on site. The balance of the displaced trees will be placed as seedlings and at locations designated per Ft. Belvoir. Landscape islands will allow areas for shade trees that will provide thermal shading and visual interest within the parking area. Native, naturalized species and hardwood mulch will be utilized to limit the required water usage. Planting bed areas at the entry of the building will be developed with the use of shrubs, groundcover plantings and trees. Flowering shrubs and groundcover bed areas will contain small species so as not to affect security. Trees will be selected to provide shade at sidewalk entrance areas, control glare and still adhere to AT/FP standards. Visual screening to mechanical areas and sound attenuation will be abated by the use of deciduous and evergreen trees and shrubs. Trees and planting beds at the front of the building will aid in wind protection. Trees will also be coordinated with parking lot and other site lighting to provide a safe environment.

Other principles of LID and LEED include proper planning and design, minimizing of the lawn areas, improving of soils, the use of mulches and appropriate plant selection. Irrigation at this time includes the establishment of the lawn and plantings

with temporary irrigation for initial grow-in period. Once the plantings and ground cover are established, irrigation shall be occasional as needed and will be the responsibility of the users.

Hardscaping will complement the landscaping and will included enhanced paving patterns, colors and materials, comprised of brick pavers, additional score patterns, colored concrete, raised planters and decorative bollards. These elements will also assist in directing the patrons to the main access and provide enjoyable areas to congregate. Porous, rigid pavement is also proposed in select parking areas (see Site Plan).

Building Design- The exterior of the new PX Shopping Center has been designed to comply with the RFP and the Fort Belvoir Installation Design Guide (IDG) standards and still balance aesthetics, easy, low cost maintenance and goals for sustainability while achieving the most efficient facility possible for the funds available.

The site area selected for the new PX Shopping Center lies within the North Post of the Fort. This area is designated a Community Land Use in the IDG. Primarily, with widely spaced developed area and bordered by a strong woodland edge, the feel for this area is suburban in scale and vehicle oriented. Buildings lying within this area are modern or international style with a distinguishing characteristic consisting of a wide variety of building types. In order to visually integrate with the architectural characteristics of the Fort the design adapts similar building materials, forms, architectural details and colors from buildings within the area, while maintaining the typology of a modern retail building. The design also follows the criteria specified in the Installation Design Guide and the AAFES Architectural-Engineering Service Requirements.

Exterior wall materials in most instances consist of pre-cast concrete panels with an inset (cast-in) red thin brick facing compatible with exterior materials for construction on the Fort. All masonry units will be in tones to provide continuity to adjacent structures. Exposed precast concrete panels, cast stone elements and EIFS banding and cornices shall be natural in color.

A key architectural feature is a covered walkway along part of the west elevation terminating with a gazebo capped with a cupola. The gazebo will also serve as a shuttle bus drop-off point for both the PX and future Commissary, when the Post shuttle bus system is placed in operation. Aside from providing cover during inclement weather, the walkway will provide a connection to future development thus enhancing the IDG design objectives of integrating building key features, and emphasizing the importance of the primary ingress and egress with site improvements that improve the open space character. Also evident from parking and street views is the elevated clerestory and sloped roof over the Interior Market Hall. Standing seam metal over all sloped roof locations will be a gray color consistent with other buildings in the area. Colors of miscellaneous architectural elements shall comply with the Installation Design Guide utilizing standard manufacturer's colors to closely match IDG colors.

Large, articulated, fenestrated openings along the west and south building face lead customers to public and retail areas. This theme is reminiscent of many historical markets throughout the world. Architectural detailing of soldier brick course arches on the west elevation with cast stone banding and EIFS cornices help complement the openings while providing horizontality lending a human scale to the PX Shopping Center and mimic the "Colonial Revival" style of architecture evident throughout the Fort.

Extensive site improvements along the west (Main) elevation include large landscaped planter bed with plantings, lawn and trees, pole area lights and concrete walks bordered by permeable pavers. The main walk leading to the building's primary entrance, as well as the secondary entrance into the Food Court, is protected by 12 inch diameter security bollards conforming to AT/FP standards.

Enclosure of the walk-in freezer/cooler boxes, as well as a portion of the Outdoor Living Area (ODL), will be accomplished utilizing the same pre-cast concrete/thin brick combination panels as on the balance of the shopping center. Secured dumpster enclosures will be constructed of matching pre-cast panels to match the building as well. The roofing system over the dumpsters shall be a standing seam metal roofing to match the front entrance and covered Outdoor Living Area materials.

Interior Design- The architectural motif of the clerestoried covered mall area is reminiscent of traditional Market Hall interiors providing major exposed structural elements in a deep forest green color in contrast to light cream colored walls with exposed secondary structural elements and decking in a blue-grey tone. Entrances to individual concessions and services are enhanced by engaged, built up columns and a signage entablature in a dark taupe palate, thus enhancing their signage and individuality.

In the balance of the store, standard AAFES materials, colors and finishes will be utilized in order to maintain AAFES branding and create a modern retail experience for both customers and employees. In consideration of a healthy working and shopping environment, day lighting has been included by the use of clerestory windows in the mall area and the use of skylights over the main Retail Sales Area and Food Court.

Sustainability- This project is pursuing LEED NC-V2.2 Silver certification per the AAFES RFP. A Preliminary LEED checklist has been produced to confirm achievement of the Silver rating is possible for the AAFES PX Shopping Center, considering all Owner-required LEED credits as well as additional credits the design achieves due to energy saving, site design and sustainable "green" construction practices. Current scorecard calculations indicate the total anticipated points will be in excess of the minimum required 33 points for Silver certification. Preliminary energy analysis calculations have been performed for the new PX Shopping Center facility to confirm compliance with EPAct 2005 and ASHRAE 90.1-2007 baseline, the Energy Independence and Security Act of 2007 and Executive Orders 13423 and 13514. Focus areas in each Credit category are as follows:

Sustainable Sites (SS)- Alternative transportation credits will be targets for compliance on this project as public transportation systems and parking capacities allow for credit possibilities in this area. Several stormwater and heat-island effect credits are also targeted on this project, as high SRI products are planned for use and stormwater runoff will be controlled to meet Ft. Belvoir requirements, regardless of LEED certification.

Water Efficiency (WE)- The planned use of water efficient landscaping and high-efficiency plumbing fixtures will contribute to meeting credit requirements in this category. Calculations are in progress to determine actual water savings from EPAct Standards.

Energy and Atmosphere (EA)- AAFES and the Design/ Build Team are committed to creating an energy-efficient building that achieves as many points as is feasible for the EA1 credit based on the whole building energy simulations which will be performed by the Team's mechanical/ electrical engineers. Potential synergies and credit interactions for the project as a whole will be evaluated in order to pursue the number of points for EA credits that most benefit the entire LEED certification process for the project.

Materials and Resources (MR)- Diversion of construction waste materials from landfill disposal, use of products with high recycled content and use of regional materials and certified wood are all targeted for this project to achieve the maximum amount of points for credits in this category relating to these issues.

Indoor Environmental Quality (IEQ)- Category prerequisites will be met on this project by following the minimum requirements of ASHRAE 62.1 for ventilation of indoor spaces, by not allowing smoking in the building and keeping exterior designated smoking areas minimum required distances from entrances and outdoor air intakes. Construction IAQ management plans and low-emitting materials will be the focus areas in this category. The Team will also employ construction methods to reduce indoor air quality problems during construction and before owner occupancy. Last, Specifications will be created on this project to limit the amount of VOC's and urea-formaldehyde used on products incorporated in the construction and carpet systems will be provided by the Owner that meet the standards listed in the credit requirements.

Innovation and Design (ID)- Several ID credit possibilities are being considered for this project and await final design calculation to verify if they can be achieved.